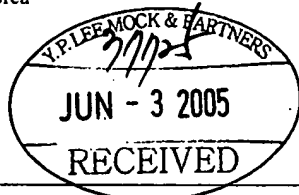


PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING

To:
LEE, Young-Pil

The Cheonghwa Bldg. 1571-18 Seocho-dong, Seocho-gu
Seoul 137-874 Republic of Korea



PCT

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY
EXAMINING AUTHORITY

(PCT Rule 66)

F

Date of mailing
(day/month/year) 26 MAY 2005 (26.05.2005)

Applicant's or agent's file reference
HB-20863-PCT

REPLY DUE within 2 months from
the above date of mailing

International application No.
PCT/KR2004/000962

International filing date (day/month/year)
26 APRIL 2004 (26.04.2004)

Priority date(day/month/year)
09 MAY 2003 (09.05.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC7 H05H 1/18

Applicant

HANYANG HAK WON CO., LTD. et al

1. ☐ The written opinion established by the International Searching Authority :
☒ is ☐ is not
considered to be a written opinion of the International Preliminary Examining Authority.
2. This _____ (first, etc.) opinion contains indications relating to the following items:
 - ☒ Box No. I Basis of the opinion
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.

When ? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(e).

How ? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis. For an informal communication with the examiner, see Rule 66.6. For an additional opportunity to submit amendments, see Rule 66.4.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary report on patentability
(Chapter II of the PCT) must be established according to Rule 69.2 is: **30 AUGUST 2005 (30.08.2005)**

Name and mailing address of the IPEA/KR



Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

SEO, Hawthorne

Telephone No. 82-42-481-5670



**WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMING AUTHORITY**

International application No.

PCT/KR2004/000962

Box No. 1 Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which was filed, unless otherwise indicated under this item.
- ☐ This opinion is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this opinion has been established on the basis of (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."):
- ☒ the international application as originally filed
- ☐ the description:
- pages _____, as originally filed/furnished
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ the claims:
- pages _____, as originally filed/furnished
- pages _____, as amended (together with any statement) under Article 19
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ the drawings:
- pages _____, as originally filed/furnished
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to the sequence listing (specify): _____
4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to the sequence listing (specify): _____

**WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMING AUTHORITY**

International application No.

PCT/KR2004/000962

**Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1
	Claims	
Inventive step (IS)	Claims	1
	Claims	
Industrial applicability (IA)	Claims	1
	Claims	

2. Citations and explanations :

The following documents are referred:

D1: KR 2001-60200 A

D2: US 6140773 A

1. D1 discloses a plasma generating device in which the working electrode is located near the gas inlet, and the ground electrodes near the emission hole.

D2 discloses a plasma source array in which several sources are mounted in parallel. Accordingly, the subject-matter of Claims 1-4 is considered to be novel (Article 33(2) PCT).

2. The closest state of the art appears to be represented by D1. Regarding the independent Claim 1, the technical concept advanced over D1 is the multiple dielectric walls. Said walls separate the cavity into several channels, and make it possible for the gas to flow through said channels. Neither D1 nor D2 suggests those such channels for gas flow. Thus, Claim 1 involves an inventive step and meets the requirement of Article 33(3) PCT.

3. The industrial applicability of said subject-matters is self-evident.